95% SUBMISSION

PUM	PUMP SCHEDULE	DULE																		
REFERENCE	m			PUMP									ELECTRICAL	AL				MOUNTING		
MARK	MFGR	MODEL	SERVICE	TYPE	SPEED,	CAPACITY,	TOTAL HEAD,	OPP. TEMP,	IMPELLER SIZE, MM (IN)	EFFICIENCY	CONNECTIC	CONNECTIONS, MM (N.)	(GHB)	MOTOR	VOLTS	PHASE	MOTOR TYPE	TYPE	WEIGHT	REMARKS
GWP-1	B&G	SERIES 80 2.5x2.5x9.5B	GEOTHERMAL WATER	IN-LINE	1750	341 (90)	149 (50)	71 (160)	187 (7.375)	40	64 (2.5)	64 (2.5)	2.7 (3.62)	3.7 (5)	208	3	TEDP	N-LINE	102 (225)	(1)(2)(3)(4)
GWP-2	B&G	SERIES 80 2.5x2.5x9.5B	GEOTHERMAL WATER	IN-LINE	1750	341 (90)	149 (50)	71 (160)	187 (7.375)	40	64 (2.5)	64 (2.5)	2.7 (3.62)	3.7 (5)	208	3	TEDP	IN-LINE	102 (225)	1 2 3 4
PHWP-1	B&G	SERIES 80 3x3x7B	PRIMARY HEATING WATER	IN-LINE	1750	625 (165)	110 (37)	71 (160)	168 (6.625)	59	76 (3)	76 (3)	2.17 (2.91)	2.2 (3)	208	3	TEDP	IN-LINE	86 (190) (1234
PHWP-2	B&G	SERIES 80 3x3x7B	PRIMARY HEATING WATER	IN-LINE	1750	625 (165)	110 (37)	71 (160)	168 (6.625)	59	76 (3)	76 (3)	2.17 (2.91)	2.2 (3)	208	3	TEDP	IN-LINE	86 (190) (1234
SHWP-1	B&G	SERIES 80 2x2x9.5B	SECONDARY HEATING WATER	IN-LINE	1750	265 (70)	19 (62)	71 (160)	203 (8)	55	51 (2)	51 (2)	1.49 (2.0)	2.2 (3)	208	3	TEDP	IN-LINE	86 (190) (1)2(3)4
SHWP-2	B&G	SERIES 80 2x2x9.5B	SECONDARY HEATING WATER	IN-LINE	1750	265 (70)	19 (62)	71 (160)	203 (8)	55	51 (2)	51 (2)	1.49 (2.0)	2.2 (3)	208	3	TEDP	IN-LINE	86 (190) (1)(2)(3)(4)
TYPICAL RE	TYPICAL REQUIREMENTS:						X REMARKS:													
A. F	RE: DIVISION 23 SE	RE: DIVISION 23 SECTION "HYDRONIC PUMPS" FOR SPECIFICATIONS.	SPECIFICATIONS.				1. PUMP SI	SIZING AND PERF	IZING AND PERFORMANCE BASED ON 30% PROPYLENE GLYCOL $/$ 70% FRESH WATER	30% PROPYLENE	GLYCOL / 70)% FRESH WA	TER SOLUTION.	•						
В	MPELLER SIZE SCH	IMPELLER SIZE SCHEDULED IS APPROXIMATE. FIN.	FINAL SIZE SHALL BE DETERMINED BY	TERMINED BY MANUFACTURER BASED ON			2. FURNISH		WITH STRAIGHT TRIPLE DUTY VALVE AND SUCTION DIFFUSER	AND SUCTION DIF	FUSER.									
,							3. FURNISH DISCONN	H PUMP WITH INVERTINECT, AND LOCKOUT	PUMP WITH INVERTER—DUTY RATED MOTOR AND ASSOCIATED VARIABLE FREQUENCY DRIVE. LOCAL IECT, AND LOCKOUT TAGOUT PROVISIONS FURNISHED BY MECHANICAL INSTALLED BY ELECTRICAL.	MOTOR AND ASSCONS FURNISHED B	CIATED VARIAE Y MECHANICAL	3LE FREQUEN . INSTALLED I	CY DRIVE. LO	CAL						

HC W	A	֡֡֞֝֞֝֞֝֞֝֞֝֟֞֝֞֝֞֝֟֝֝֟֝ ׆	FERENCE GENERAL GENERAL	CHEDULE	PERFORM	PERFORMANCE DATA	P									ELECTRICA	2			MOUNTING			
MARK MFGR		MODEL	SERVICE	TYPE	FUEL		NPGT	OUTPUT	MN. FLOW	MAX. FLOW	EWT,	LWT,	VOLUME,	Pressure, Psi	RE, PSI	VOLT	PHASE	ఠ	MOCP	TYPE	OPERATING	SHIPPING	REMARKS:
					TYPE	N. WC.	MBH	MBH	GPM	QPM	deg F	deg F	GAL	WORK	VESS						WT. LBS.	WT. LBS.	
B-1 HYDROTHERM		KN-20	HOT WATER	CAST IRON SECTIONAL	NATURAL GAS	7	2,000	1,700	30	130	160	180	26	45	100	208	→	11	20	BASE	2,400	2,400	1)(2)(3)(4)
TYPICAL REQUIREMENTS:	S.									•													
A. RE: DIV	ISION 15 SE(CTION "CONDEN	A. RE: DIVISION 15 SECTION "CONDENSING BOILERS" FOR SPECIFICATIONS.	SPECIFICATIONS.																			
1. PROVIDI	E WITH MODU	ILATING GAS V/	ALVE, DRAFT INDUCER,	1. PROVIDE WITH MODULATING GAS VALVE, DRAFT INDUCER, CONCENTRIC VENT/AIR TERMINATION ASSEMBLY INCLUDING THIMBLES AND SUPPORTS AND A.G.A./FM APPROVED GAS TRAIN.	N ASSEMBLY INCI	LUDING THIMBLE	S AND SUPPOR	RTS AND A.G.A.,	FM APPROVED		ER FLUE TO BE	EXTENDED IN F	UTURE DUE TO	BOILER FLUE TO BE EXTENDED IN FUTURE DUE TO ADDITION OF ELEVATOR AND BUILDING EXPANSION.	EVATOR AND BL	JILDING EXPANSI	ON.						
2. BOILER	PERFORMANO	DE BASED ON	30% PROPYLENE GLY	BOILER PERFORMANCE BASED ON 30% PROPYLENE GLYCOL / 70% FRESH WATER SOLUTION.	•																		
3. BOILER	SHALL BE FI	IELD ADJUSTAB	3. BOILER SHALL BE FIELD ADJUSTABLE TO REQUIRE NO DE-RATION OF OUTPUT	E-RATION OF OUTPUT CAPACITY																			

REFERENCE	œ •				HOT SIDE	윤			COOL S	SIDE				
MARK	MANUFACTURER	MODEL #	TYPE	SERVICE	QPM	EWT,	LWT,	P.D.	QPM	EWT,	LWT,	P.D.	HEAT TRANSFER, MBH	REMARKS
HEX-1	HEX-1 ITT HEAT TRANSFER	P47	PLATE & FRAME	HEATING WATER	89.4	160	123	1.53	165	120	140	5.03	1,627	(1)(2)(3)
X REMARKS:	MARKS:					\ 								
	1 HOT SIDE FILE			COLD SIDE ELLID: 30% DROBYLENE GLYCOL / 70% ERESH WATER SOLLTION	NE GLYCOL	/ 70% FR	ESH WATER	SOLUTION						
	2. PLATES SHALL	 HOT SIDE FLUID: GEOTHERMALLY HEATED FRESH WATER; PLATES SHALL BE 316 STAINLESS STEEL. 				•								

REFERENCE	•••		GENERAL							
MARK	MFGR	MODEL	SERVICE	TYPE	STRANER	CONNECTIONS MAN (IN)	Design Flow, L/M (GPM)	WPD, KPA MM (FT.)	STRANER AREA, SQ MM (SQ N)	REMARKS
AS-1	B&G	R-4	HEATING WATER	SUSPENDED	YES	102 (4")	624 (165)	- (-)	90322 (140)	1)(2)
TYPICAL R	TYPICAL REQUIREMENTS:				X) REMARKS:	ARKS:				
۶	RE: DIVISION 23 S	SECTION "HYDE	A. RE: DIVISION 23 SECTION "HYDRONIC PIPING AND SPECIALTIES" FOR SPECIFICATIONS	LTIES" FOR SPECIFICA	. (PROVIDE WITH EXPANSION TANK VENT CONNECTION AT 	NICIONI TANIK VENIT	CONNECTION	AT TOP	
							ANDIOIN TAINN VENT			

REFERENCE	111		GENERAL							
MARK	MFGR	MODEL	SERVICE	TYPE	CONFIGURATION	TANK VOLUME, L (GAL)	ACCEPTANCE VOLUME, L (GAL)	SYSTEM CHARGE PRESSURE, KPA (PSIG)	OPP. WEIGHT KG (LBS)	REMARKS
PET-1	B&G	B-400	HEATING WATER	BLADDER TANK	VERTICAL	400 (106)	400 (106)	1	537 (1184)	1)(2)(3)(4)
A. RE	TYPICAL REQUIREMENTS:									
	UIREMENTS:	//SION 23, "H	REFER TO DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES" FOR		ADDITIONAL REQUIREMENTS	TS.				
X REMARKS:	UIREMENTS: FER TO DIV	/ISION 23, "H	HYDRONIC PIPING AND	_	ADDITIONAL REQUIREMEN:	TS.				
X REMARK	UIREMENTS: FER TO DIV. S: 1. TANK	/ISION 23, "H	ENTS: TO DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES" FOR TANK SIZING BASED ON 30% PROPYLENE GLYCOL / 70%	η	ADDITIONAL REQUIREMENT	TS.				
X) REMARK	UIREMENTS: FER TO DIV S: 1. TANK 2. FURN	ISION 23, "H	HYDRONIC PIPING AND SED ON 30% PROPYLEN	ACCESSORIES" FOR A	NTS: O DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES" FOR ADDITIONAL REQUIREMENTS. TANK SIZING BASED ON 30% PROPYLENE GLYCOL / 70% FRESH WATER SOLUTION. FURNISH WITH CHARGING VALVE, 25 mm (1") NPT TOP SYSTEM CONNECTION, DRAIN VALVE, FLOOR MOUNTING SKIRT, AND SADDLES.	TS.	OUNTING SKIRT, AN	O SADDLES.		
X) REMARK	UIREMENTS: FER TO DIV S: 1. TANK 2. FURN 3. SYST	/ISION 23, "H	MENTS: TO DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES 1. TANK SIZING BASED ON 30% PROPYLENE GLYCOL / 2. FURNISH WITH CHARGING VALVE, 25 mm (1") NPT . 3. SYSTEM CHARGE PRESSURE SHALL BE SET IN FIELD	ACCESSORIES" FOR A	ADDITIONAL REQUIREMENTESH WATER SOLUTION.	TS. N VALVE, FLOOR M	OUNTING SKIRT, ANI	O SADDLES.		
X REMARK	UIREMENTS: FER TO DIV S: 1. TANK 2. FURN 3. SYST 4. CONTI	/ISION 23, "H SIZING BAS VISH WITH CH EM CHARGE	MENTS: TO DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES" FOR A TO DIVISION 23, "HYDRONIC PIPING AND ACCESSORIES" FOR A T. TANK SIZING BASED ON 30% PROPYLENE GLYCOL / 70% FR 2. FURNISH WITH CHARGING VALVE, 25 mm (1") NPT TOP SYST 3. SYSTEM CHARGE PRESSURE SHALL BE SET IN FIELD 4. CONTRACTOR SHALL MOUNT EXPANSION TANK ON 4" CONCRETE HOUSE	ACCESSORIES" FOR A E GLYCOL / 70% FF (1") NPT TOP SYS ET IN FIELD N 4" CONCRETE HOUSE	ADDITIONAL REQUIREMENTS. RESH WATER SOLUTION. TEM CONNECTION, DRAIN VALVE, FLOOR MOUNTII KEEPING PAD. COORDINATE WITH GENERAL CONTRACTOR.	TS. N VALVE, FLOOR M	OUNTING SKIRT, AN	O SADDLES.		

			GENERAL								
MARK	MFGR	MODEL	SERVICE	CAPACITY,	MAX. PRESSURE,	PUMP(S),	ELECTRICAL	NCAL	TANK VOLUME,	WEIGHT,	REMARKS
				GPM	PS	(QUAN) HP	VOLT	PHASE	GAL	LBS	
GF-1	WESSELS	GMP-15100	HEATING WATER LOOP	1.7	70	(1) 1/2	120		100	1,100	1)(2)(3)
X REMARKS:	ARKS:										
	 PERFORMA 	NCE BASED ON		FRESH WATER SOLUTION.	DN						
	2. FURNISH V		. PERFORMANCE BASED ON 30% PROPYLENE GLYCOL / 70% FRESH WATER								
		WITH LEVEL SWITC	1. PERFORMANCE BASED ON 30% PROPYLENE GLYCOL / 70% FRESH WATER 2. FURNISH WITH LEVEL SWITCH CONTACT FOR MONITORING BY DDC SYSTEM		Š						
GF-1 X REMAR	N -	GMP-15100	HEATING WATER LOOP	1.7		(QUAN) HP	VOLT 120	PHASE	100	1,100	

(208) 343-4635 • FAX (208) 343-1858 ADDITIONS TO THIS PROJECT. WHEN PHASED-WITH PROJECT. WHEN PHASED-WITH OF CSHQA OR ITS AFFILIATES.	~ C < J O J	250 S. 5TH ST BOISE, IDAHO PHONE: 208-343-4635	C.W. MOORE PLAZA
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	CONSTRUCTION	PRELIMINARY NOT FOR	
APPROVED: SERVICE DIRECTOR	APPROVED: DIVISION CHIEF	EQUIPMENT SCHEDULES	' <i> </i>
BOISE, IDAHO	BUILDING NUMBER CHECKED DRAWN 33 CHECKED DRAWN DJ	PHASE ONE BUILDING 33	VAMC
DWG. 10 OF 32	JH MO 3	PROJECT NO. 531-10-114	03/03/11
DEPARTMENT OF VETI			

03/03/11	
PROJECT NO. 531—10—114	
DRAWING NO.	
M0.3	
DWG. 10 OF 32	DEPARTMENT OF VETERANS AFFAIRS